

# Disaster-related Statistics Framework Initial results of DRSF table A1 and B1a Nepal's Experience

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#### **Disaster**

· "Disaster" means causing a threatening situation in any place that results in loss of lives and properties and makes severe impacts on livelihood and the environment

Non- natural and natural disaster

#### Non-natural disaster

· An epidemic, famine, wild fire, insects or anthrax attack, animal and bird flu, pandemic flu, snake bite, animal attack, mine, aviation, road, water or industry related accident, fire, toxic gas, chemical or radiation leakage, gas explosion, consumption of toxic foods, environmental pollution, deforestation, or damage to physical infrastructure, and accidents in time of disaster rescue or similar other disasters occurred from non-natural disasters

#### Natural disaster

Snow fall, hailstone, avalanche, glacial lake outburst flood (GLOF), extreme rainfall, low rainfall, flood, landslide and soil erosion, inundation, storm, drought, cyclone, cold wave, heat wave, lightening, earthquake, volcanic eruption, wild fire or similar other disasters occurred from natural causes

# Data collection/compilation.....

- Security agencies (Nepal Army, Nepal Police, Armed Police Force, Department of National Intelligence, and Provincial Police) have major role for data collection
- The real-time hazard risk monitoring system such as Seismic stations, hydro-metrological stations, lightening detection centers has been developed for data collection

Local/District/Provincial Disaster Management
 Committee

# Data collection/compilation

 Death, injured and Economic losses is estimated by the data collection on the field which is verified by different disaster management committees

• GoN is working on developing the level of understanding of disaster risk among the all tiers of government including the non-government and private sectors

# For Table A1( Summary table of disaster occurrences, by hazards types, scale, and geographic)

		Province 1		Province 2					
	Very large events	National scale medium to large events	Local scale events	Very large events	National scale medium to large events	Local scale events			
Geo-physical									
Hydrological									
Meteorological & Climatological									
Biological									
Other									
Total									

- Province level data available according to the given classification(Geo-physical, Hydrological, Meteorological & Climatological, Biological, Other and Total) but not on very large, medium and local scale
- The data source is <a href="http://drrportal.gov.np/">http://drrportal.gov.np/</a>

#### B1.Population Background Statistics and Hazard Exposure by geographic regions

		Geo. Region 1	Geo. Region 2	Geo. Region 3	Geo Region	NATIONAL TOTAL	Measurement Unit
1	Population	SDG 1.5.1, Sendai	No. of people				
	·	A1,B1	A1,B1	A1,B1	A1,B1	A1,B1	
1.1	Children under 5 years						No. of people
1.2	Persons over 60 years						No. of people
1.3	Persons with disabilities						No. of people
2	Households						No. of households

**SDG 1.5.2** 

**SDG 1.5.2** 

currency

currency

US\$ PPP

currency

currency

US\$ PPP

No. of people

**SDG 1.5.2** 

**SDG 1.5.2** 

Median Households disposable

Population in Hazard Area

Local currency (NAME...)

Local currency (NAME...)

US\$ PPP

US\$ PPP

High exposure

Low exposure

High exposure

Low exposure

Moderate exposure

Moderate exposure

**SDG 1.5.2** 

income

**GDP** 

*5.1* Geophysical

*5.2* Hydrological

3.1

3.2

4.1

4.2

5.1.1

5.1.2

5.1.3

5.2.1

5.2.2

5.2.3

#### **Data sources**

- Population Census 2021
- GDP estimation by NSO
- Nepal Living Standard Survey 2022/23
- National Climate Change Impact Survey
- Administrative data collected by Ministry of Home Affairs and other stakeholders

#### **DRR Portal**

ource	Incident Type	District	Vdc	From	То			
Select a option `	Select Incident V	Select a option V	Select Vdc V	YYYY-MM-DD	YYYY-MM-DD	Search	Export	Print

S.No.	District	VDC/Municipality	Incident	Incident Date	Death Male	Death Female	Death Unknown	Total Death	Missing People	Affected Family	Estimated Loss	Injured	Govt. Houses Fully Damaged	Govt. Houses Partially Damaged
1	Kaski	Pokharalekhnath Metropolitan City	Earthquake	2022-06- 24	0	0	0	0	0	1		1	0	0
2	Kathmandu	Kathmandu Metropolitan City	Fire	2022-06- 24	0	0	0	0	0	1		1	0	0
3	Lalitpur	Godawari Municipality	Fire	2022-06- 24	0	0	0	0	0	1		0	0	0
4	Siraha	Golbazar Municipality	Fire	2022-06- 24	0	0	0	0	0	2	40000	0	0	0
5	Kathmandu	Tokha Municipality	Heavy Rainfall	2022-06- 24	0	0	0	0	0	1	150000	0	0	0
6	Kaski	Pokharalekhnath Metropolitan City	Heavy Rainfall	2022-06- 24	0	0	0	0	0	1		0	0	0
7	Salyan	Kalimati Rural Municipality	Animal Incidents	2022-06- 24	0	0	0	0	0	1		1	0	0

#### **Disaster and Basic Statistics**

#### Disaster data in Population Census 2021

First time to introduce community questionnaire in population census

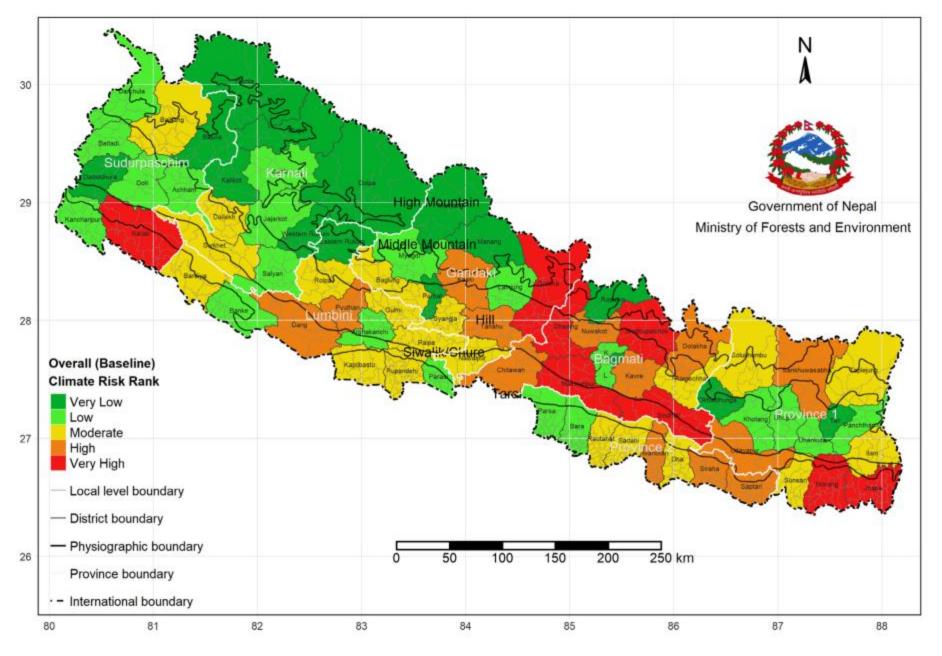
- To be collected at Ward level (7643 wards)
- To include thematic area on natural disaster and hazard
  - Condition like flood, landslide, soil erosion, inundation, thunderstorm, hailstorm, sporadic rain, heat wave, cold wave, drought, avalanche etc..
  - Loss of life and property in one year
- As the baseline data for disaster mapping and other special disaster-related survey

#### **Environment Statistics Section in CBS**

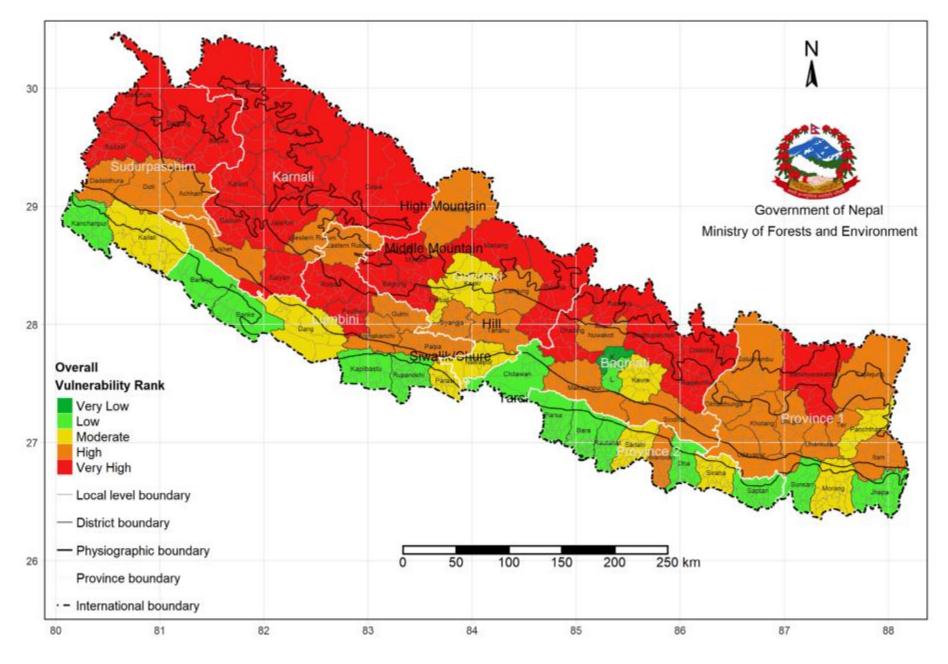
- Regular publication of Environment Statistics of Nepal in the interval of 2/3 years with the guidelines of UN FDES where there is one module disaster statistics
- Environment compendium \_ an analytical report

# **Risk Assessment**

- Disaster risk maps, Disaster exposure maps, hazard maps, disaster maps, etc. can be developed by using the community data from the population census
- Climate induced risk and vulnerability maps are produced my Ministry of Forest and Environment



Baseline risk of climate change impact in Nepal



**Vulnerability Map of Nepal** 

# **Challenges**

- Uncertainty of risk due to climate change
- Lack investment in preparedness & early actions
- Knowledge gaps
  - in understanding the diverse risks due to limited scientific assessments
  - in information, technology and knowledge on the practical aspects of the DRRM
  - in proper allocation of budgeting, planning, and execute activities related to disaster risk
  - in linkages among the institutions/agencies involved in forecasting, managing and assessing the risks and responses
  - in bilateral, international efforts to tackle the transboundary nature of hazards

# **Expectations & way forward**

- Better understanding of risks through research, surveys and assessments(expecting support from UNESCAP)
- National Climate Change Survey Second round
- Improved institutional arrangements and structures
- Bilateral and international cooperation for knowledge and technology
- Empowered leadership of province and local governments
- Capacity development program



Thank you !!!
Your comments and queries are highly appreciated !!!